

ABSTRACT OF THE DISCLOSURE

Disclosed is a distortion compensating apparatus for correcting the size of a distortion compensation coefficient in such a manner that a transmit signal that  
5 has undergone distortion compensation will not exceed the dynamic range of a DA converter. Specifically, before a distortion compensation coefficient  $h_{n+1}(p)$  that has been calculated by a calculation unit is stored in a coefficient memory, an assumption is made that  
10 distortion compensation will be performed using the distortion compensation coefficient  $h_{n+1}(p)$ . Then it is determined beforehand whether a signal  $x(t) * h_{n+1}(p)$  that will be obtained by this distortion compensation will exceed the limit of a DA converter. If the limit will  
15 be exceeded, the size of the distortion compensation coefficient is reduced by a correction unit, the corrected distortion compensation coefficient is stored in the memory and the transmit signal is corrected using the stored distortion compensation coefficient.